

DMS-8130, Epoxy Powder Coating for Reinforcing Steel

Overview

(Formerly D-9-8130, Epoxy Powder Coating for Reinforcing Steel).

Effective Date: August 1998 – July 2004.

This specification shall govern for the materials, composition, quality, sampling, and testing of epoxy powder coating and repair material for epoxy coated reinforcing steel.

Notice to Suppliers

All suppliers are notified that any material proposed for use on a project shall be a prequalified formulation that complies with the requirements of this specification. A list of approved materials is available from the Construction Division, Materials & Pavements Section (CST/M&P) in Austin, Texas.

Prequalification

Suppliers who desire to prequalify their material under this specification should contact the Texas Department of Transportation, Construction Division, Director of Materials & Pavements Section (CP51), 125 East 11th Street, Austin, TX 78701-2483.

Submittals

At the time of contact, the following shall be submitted:

- ◆ A certified copy of a test report, from an independent laboratory, showing test results and certification that the proposed material has been tested and meets all prequalification requirements of organic coatings for steel reinforcing bars according to AASHTO M284, Annex A1.
- ◆ A 225 gram (eight [8] ounce) sample of each proposed epoxy powder coating and repair material
- ◆ A technical data sheet showing description, application, handling, and storage procedure
- ◆ Twelve (#5) deformed reinforcing bars 1.22 meters (four [4] feet) in length, coated to the requirements of “Item 440, Reinforcing Steel” of the TxDOT Standard Specifications.

All materials for prequalification tests will be submitted at no cost to TxDOT.

Notification

Manufacturers will be notified, after their material has been evaluated, as to conformance with the requirements of this specification.

Once a material is approved, any changes in formulation shall be reported to the Director of CST/M&P.

A 225 gram (eight [8] ounce) sample of the new formulation shall accompany the reporting of the change.

TxDOT reserves the right to require prequalification if, in the opinion of the Director of CST/M&P, the formulation change alters the protective characteristics of the material.

Sampling

Sampling of approved epoxy powder coatings shall be in accordance with Test Method "Tex-738-I, Sampling Epoxy Powder Coating for Reinforcing Steel."

Material Requirements

Epoxy powder coating and repair material shall meet the following:

Chemical Requirements

Powder coating and repair material shall match infrared spectrum and x-ray diffraction data, test methods "Tex-888-B, Obtaining the Infrared Spectrum of Organic Materials," and "Tex-896-B, Qualitative and Semi-Quantitative Analysis of Crystalline Material by X-ray Diffraction" originally furnished to CST/M&P.

Each batch of powder coating and repair material supplied shall be accompanied with:

- ◆ Certification that material meets the requirements of this specification
- ◆ Identification of product code, batch number, date of manufacture, quantity represented, and name and address of the manufacturer.

Physical Requirements

The epoxy coating shall show no cracking, delamination, or loss of adhesion when tested in accordance with Test Method "Tex-739-I, Sampling and Testing Epoxy Coated Reinforcing Steel."